

## Type VDR



### FOR LARGE TEMPERATURE DIFFERENCES IN HEATING MODE, HIGH PENETRATION OF AIR, WITH ADJUSTABLE AIR CONTROL BLADES

Circular ceiling diffusers, with manual or motorised adjustment of the air discharge direction, particularly suitable for high rooms

- Nominal sizes 315, 400, 630, 800
- Volume flow rate range 175 – 1495 l/s or 630 – 5382 m<sup>3</sup>/h
- Diffuser face made of aluminium
- For supply air
- For variable and constant volume flows
- Discharge direction can be adjusted manually or with an actuator
- High penetration of air at low sound power level

#### Optional equipment and accessories

- Exposed diffuser face available in RAL CLASSIC colours
- Horizontal or vertical duct connection
- Actuators for adjusting the air discharge direction



## APPLICATION

### Application

- Type VDR ceiling diffusers are used as supply air diffusers for high rooms in comfort and industrial zones
- For mixed flow ventilation with different air patterns in heating and cooling modes
- Horizontal two-way supply air discharge in cooling mode
- High induction results in a rapid reduction of the temperature difference and airflow velocity
- Angled or vertical air discharge in heating mode
- For variable and constant volume flows
- For supply air to room air temperature differences from –10 to +15 K
- For room heights exceeding 3.8 m
- For suspended ceilings
- Freely suspended installation
- Ideal for use with TDC temperature difference control module

### Special characteristics

- High penetration of air at low sound power level
- Particularly suitable for rooms with varying heat loads
- Ideal adaptation of the air discharge pattern due to two sections of adjustable blades
- Discharge direction can be adjusted manually or with an actuator
- Plenum box with side entry or top entry spigot, and variant with electric actuator and inspection access

### Nominal sizes

- 315, 400, 630, 800

## DESCRIPTION

### Variants

- Diffuser face only

### Connection

- H: Horizontal duct connection
- V: Vertical duct connection

### Parts and characteristics

- Circular diffuser face with two sections of adjustable blades
- Diffuser front frame
- Spigot ring

### Attachments

- Electric actuators for adjusting the air discharge direction

### Useful additions

- TDC temperature difference control module

### Construction features

- Spigot suitable for circular ducts to EN 1506 or EN 13180

### Materials and surfaces

- Blades, front frame and spigot ring made of aluminium
- Plenum box and cross bar made of galvanised sheet steel
- Front frame, blades and spigot ring powder-coated RAL 9010, pure white
- P1: Powder-coated, RAL CLASSIC colour

### Standards and guidelines

- Sound power level of the air-regenerated noise measured according to

EN ISO 5135

#### Maintenance

- Maintenance-free as construction and materials are not subject to wear
- Inspection and cleaning to VDI 6022

#### TROX Middle East (LLC)

---



P.O. Box No. 31432  
19 Street  
Al Quoz Industrial Estate #3  
Dubai  
United Arab. Emirates  
Tel.: +971 4 3417448  
Fax: +971 4 3417449

#### Online-Services

---

TROX Academy

---

Your contact partner

---

#### Service-Hotlines

---

United Arab. Emirates

Tel.: +971 4 3417448

Fax: +971 4 3417449

[Contact](#)